

**CLAIMS:**

What is claimed is:

1. A system for transmitting data from a client computer to a remote computer, the system comprising:

- 5 (a) a communication service provider simulative server in communication with the client computer; and
- (b) a client computer simulative server in communication with the remote computer and with the communication service provider simulative server.

10 2. The system for transmitting data as described in claim 1, wherein the remote computer comprises a communication service provider.

15 3. The system for transmitting data as described in claim 2, wherein the communication service provider comprises an Internet service provider.

4. The system for transmitting data as described in claim 1, wherein the client computer and the remote computer are in communication with one another so as to transmit data via optical signals.

20 5. The system for transmitting data as described in claim 1, wherein the client computer and the remote computer are in communication with one another via wireless link.

6. A system for transmitting data from a client computer to a remote computer, the system comprising:

- (a) a local server in communication with the client computer and  
5           programmed to appear to the client computer as a communication  
          service provider;
- (b) a remote server in communication with the local server;
- (c) a communication service provider in communication with the remote  
          server; and
- 10       (d) wherein the remote server is programmed to appear to the  
          communication service provider as a client computer.

7. A system for implementing communications between a client computer and one or more remote computers, the system comprising:

- 15       (a) one or more software applications operating on the client computer;
- (b) a remote computer simulator for presenting to the one or more  
          applications a communications interface that appears as a remote  
          computer;
- (c) a client simulator for presenting to the remote computer a  
20       communications interface that appears as the client;
- (d) means coupled to the remote computer simulator for multiplexing plural  
          communication connections from the client into a single  
          communications session between the client simulator and the remote

computer simulator, the multiplexing means combining data of different priorities, all data above a specific priority being combined into a first communication channel.

- 5 8. A communication method comprising the steps of:
- (a) receiving a plurality of data packets;
  - (b) combining the plurality of data packets together;
  - (c) establishing a single connection for transmitting the combined plurality of data packets; and
  - 10 (d) transmitting the combined plurality of data packets.
9. The communication method as described in claim 8, wherein the step of receiving is performed by a multiplexer and the step of combining comprises multiplexing.
- 15 10. The communication method as described in claim 8, further comprising:
- (a) determining whether the message is a high priority control message;
  - (b) if the message is determined to be a high priority control message, transmitting the message on a high priority channel; and
  - 20 (c) if the message is determined not to be a high priority control message, transmitting the message on a normal priority channel.
11. The communication method as described in claim 8, further comprising:

- (a) receiving the combined plurality of packets;
- (b) separating the combined plurality of packets; and
- (c) distributing the separated plurality of packets.

5    12.    The communication method as described in claim 11, wherein the step of receiving is performed by a demultiplexer and the step of combining comprises demultiplexing.

13.    A communication protocol comprising the steps of:

- (a) receiving a packet containing data;
- (b) determining whether the packet is high priority control;
- (c) if the packet is not of high priority control, combining the packet with other packets for transmission in a normal priority channel.

15    14.    The communication protocol as described in claim 13, wherein if the packet is of high priority control, designating the packet for transmission in a high priority channel.